

MEMORANDUM

State of Alaska

TO: John McMullen
Regional Supervisor
F.R.E.D. Division
Juneau

DATE: September 23, 1974

FILE NO:

TELEPHONE NO:

FROM: Paul Novak
Fishery Biologist
Commercial Fisheries Division
Department of Fish and Game
Ketchikan

SUBJECT: Hyder Road and Dike Follow-up Study

Past involvement with the Highway Department at Hyder, Alaska as functioned at assessment of damage created during annual late summer flooding impact on Fish Creek. Emphasis of concern has arisen due to the unique chum salmon population that supposedly utilizes this stream for spawning and incubation. Feeble attempts have been made to protect this species from man's impact of road-ing and upstream logging (Texas Creek and Salmon River) and associated siltation problems. These impacts, coupled with the glacial lake annual release by flooding back into the Salmon River play havoc with annual returns of salmon spawning areas and egg survival.

During the past two years the Department of Fish and Game has been closely associated with the Department of Highways in the planning phase of constructing a trail dike system on the Salmon River that could feasibly restore Fish Creek area to its near natural conditions and provide long range protection.

It appears that we are on the right track with this project as the annual lake release this year produced flooding conditions on the Salmon River that failed to inundate Fish Creek.

Repair work will be necessary this year to strengthen the dike and replace damaged sections of this system. Facing the dike along its entire length and adding more height and width should be encouraged.

A small rehabilitation project on Fish Creek (above the bridge) could easily provide additional riffle area for spawning. Presently there is a constriction of the stream that was created when the road system last washed out. A deposit of gravel and rubble resulted that forms a pool condition upstream that is approximately 350 feet long, 65 feet wide and 3-4 feet deep. By removing 18 to 24 inches of this deposit the riffle area could be restored to productive spawning habitat.

Warren Wild of the Department of Highways has assured me that they would assist in the project whenever they had equipment in the vicinity. I commented that next June would be the best time to carry out this project.

John McMullen

-2-

September 23, 1974

Escapement figures for Fish Creek this year are as follows:

<u>Date</u>	<u>Species</u>	<u>Surveyed by</u>
August 29, 1974	13,700 chum	J. McMullen P. Larson P. Novak
September 16, 1974	1,080 chum	P. Novak

The success of this project has been mainly due to the Grand Duke Mine personnel and the Department of Highways.

Pictures were taken during the field trip and will hopefully depict the Fish Creek, Salmon River, Texas Creek, the glacial system and Grand Duke Mine. These will be forwarded to your division as soon as they are returned from the processor.

cc: Warren Wild, Department of Highways